DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

1. **Claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cimino et al (hereinafter Cimino) US Patent 5127532 in view of Titus et al (hereinafter Titus) US Patent 6406227.**

·   **In regards to claims 1 and 19**, Cimino teaches an interactive object

identification system comprising; interactive user interface means for manually inputting

at least one specified variable related to a first object into at least one input field of a

plurality of input fields (column 2 lines 43-61, wherein when the user manually inputs the

physical key wherein the profile of the key is the specified variable and the first object is

the key, wherein the input field is the key profile information input into the database

memory which then searches through a plurality of input fields of information to match

the key blank), wherein at least one of said plurality of input fields in the interactive user

interface means includes at least one specified variable (column 2 lines 43-61, wherein

the lensing system illuminates the front of the key to form a cross-sectional image for

the video system to convert to a digital image as the cross-sectional image taken is the

manual input of the first object), said specified variable being known or physically

observed based upon a visual inspection of the object (column 2 lines 43-61, wherein

the lensing system illuminates the front of the key to form a cross-sectional image for

the video system to convert to a digital image) by a user of the system (column 1 lines

22-33); database means for identifying a master object through comparison of known

values in response to the specified variable (column 1 lines 22-33 and column 2 lines

43-61); Cimino further teaches a display rack for holding a physical set of master

objects and an indicator for distinguishing the identified master object from the physical

set of master objects (column 5 lines 36-43). However, Cimino does not specifically

teach the specified variable as an identification of an intended use of said object.

Titus teaches a key measurement apparatus and method. Titus further teaches a

specified variable as an identification of an intended use of said object (column 18 lines

4-57).It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the method and apparatus of Cimino to include the teachings of

Titus in order to identify the use of an object. One would have been motivated to make

such a combination in order to keep an inventory of each key profile and related

information (column 19 line 12-column 20 line 20, wherein a keyway profile has related

information to that particular keyway profile in a look up table, such as whether it has a

transponder indicating it is used for a car).

⊛   **In regards to claims 3 and 14**, Cimino teaches the limitations above (see claims

1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino does not specifically teach

tracking means for recording and monitoring variables related to utilization of the

system.

Titus teaches a key measurement apparatus and method. Titus further teaches tracking

means for recording and monitoring variables related to utilization of the system

(column 13 lines 46-55).It would have been obvious to one of ordinary skill in the art at

the time of the invention to modify the method and apparatus of Cimino to include the

teachings of Titus in order to record and monitor variables of the system. One would

have been motivated to make such a combination in order to keep an inventory of each

key profile and the machine's maintenance status log (column 13 lines 46-55).

⊛   **In regards to claim 4**, Cimino teaches the limitations above (see claims 1, 16,

19, 21- 23, 26, 28, 29, and 32). However Cimino does not specifically teach wherein

the variables recorded and monitored by the tracking include information related to

inventory levels for at least one item selected from the group consisting of: the identified

master object and at least a portion of the set of other objects.

Titus teaches a key measurement apparatus and method. Titus further teaches wherein the variables recorded and monitored by the tracking include information related to inventory levels for at least one item selected from the group consisting of: the identified master object and at least a portion of the set of other objects (column 13 lines 46-55).It would have been obvious for the reasons stated above (see claims 3 and 14).

·   **In regards to claims 16 and 26**, Cimino teaches the limitations above (see claims 1 and 19). Cimino further teaches further comprising verification means for confirming that the identified master object physically provided to the user matches the information about the identified master object presented to the user (column 1 lines 22-33).

❀   **In regards to claims 17 and 27**, Cimino teaches the limitations above (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino does not specifically teach wherein the verification means includes at least one item selected from the group consisting of: a machine vision system and a radio frequency identification system.

Titus teaches a key measurement apparatus and method. Titus further teaches wherein the verification means includes at least one item selected from the group consisting of: a machine vision system and a radio frequency identification system (column 18 lines 45-57).It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and apparatus of Cimino to include the teachings of Titus in order to verify the identified master object. One would have been motivated to

make such a combination in order to verify different key profiles and inventory them for

the user's reference (column 18 lines 45-57).

·   **In regards to claim 21,** Cimino teaches the limitations above (see claims 1 and

19). Cimino further suggests wherein said indicator comprises a series of lights wherein

a single light indicative of the identified master object is selectively illuminated (column 5

lines 36-43).

·   **In regards to claim 22**, Cimino teaches the limitations above (see claims 1 and

19). Cimino further suggests wherein the indicator further comprises: (i) at least one

shift register operatively associated with the series of lights and (ii) means for selectively

adjusting the output signal to be compatible with the shift register (column 5 liens 36-

43).

·   **In regards to claims 23 and 29**, Cimino teaches the limitations above (see

claims 1 and 19). Cimino further teaches wherein the identified master object

comprises a key blank (column 2 lines 22-33).

•   **In regards to claim 25**, Cimino teaches the limitations above (see claims 1, 16,

19, 21- 23, 26, 28, 29, and 32). However Cimino does not specifically teach further

comprising a means for tracking inventory levels of the set of possible key blanks, said

means for tracking operatively associated with the computer.

Titus teaches a key measurement apparatus and method. Titus further teaches further

comprising a means for tracking inventory levels of the set of possible key blanks, said

means for tracking operatively associated with the computer. (column 18 lines 45-57).It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and apparatus of Cimino to include the teachings of Titus in order track key profiles. One would have been motivated to make such a combination in order to verify different key profiles and inventory them for the user's reference (column 18 lines 45-57).

·   **In regards to claim 28**, Cimino teaches the limitations above (see claims 1 and 19). Cimino further teaches further comprising key replication means for creating a duplicate copy of the first object (column 1 lines 22-33).

·   **In regards to claim 32**, Cimino teaches the limitations above (see claims 1 and 19). Cimino further teaches wherein the computer is selected from the group consisting of: a personal computer, a personal digital assistant, a hand-held computing device and a miniaturized, embedded computer having an integrated and abbreviated alphanumeric display (column 2 lines 43-61).

2.   **Claims 5-13, 15, 18, 30, 31, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cimino and Titus in further view of Palaniappan US Patent 6711557.**

•   In regards to claim 5, Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach further comprising means for selectively updating elements of the system utilizing a computerized network.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches selectively updating elements of the system utilizing a computerized network (column 3 line 52-column 4 line 25). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and apparatus of Cimino and Titus to include the teachings of Palaniappan in order update elements over a computer network. One would have been motivated to make such a combination in order update elements of the system a computer network by the product itself notifying the user (column 1 lines 55-65).

• **In regards to claim 6,** Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach further comprising a plurality of user interface means connected to the database means via a computerized network.

Palaniappan teaches client-based background update monitoring Palaniappan further teaches further comprising a plurality of user interface means connected to the database means via a computerized network (column 3 line 52-column 4 line 25). It would have been obvious for the reasons stated above (see claim 5).

• **In regards to claim 7,** Cimino and Titus teach the above limitations (see claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). However Cimino and Titus do not specifically teach further comprising means for selectively updating elements of the system utilizing a computerized network.

Palaniappan teaches client-based background update monitoring. Palaniappan further

teaches selectively updating elements of the system utilizing a computerized network

(column 3 line 52-column 4 line 25). It would have been obvious for the reason stated

above (see claim 5).

- **In regards to claim 8**, Cimino and Titus teach the above limitations (see

claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). However Cimino and Titus do not

specifically teach further comprising a plurality of user interface means connected to the

database means via a computerized network.

Palaniappan teaches client-based background update monitoring. Palaniappan further

teaches further comprising a plurality of user interface means connected to the

database means via a computerized network (column 3 line 52-column 4 line 25). It

would have been obvious for the reasons stated above (see claim 5).

- **In regards to claims 9 and 15**, Cimino and Titus teach the above

limitations (see claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). However Cimino

and Titus do not specifically teach wherein the tracking means transmits the variables

related to utilization of the system over a computerized network.

Palaniappan teaches client-based background update monitoring. Palaniappan further

teaches wherein the tracking means transmits the variables related to utilization of the

system over a computerized network (column 3 line 52-column 4 line 25). It would have

been obvious for the reasons stated above (see claim 5).

- **In regards to claim 10**, Cimino and Titus teach the above limitations (see claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). However Cimino and Titus do not specifically teach further comprising user help means for providing the user with assistance in operating the system.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches further comprising user help means for providing the user with assistance in operating the system (column 3 lines 13-42). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the teachings of Cimino to include the teachings of Palaniappan in order to provide assistance to the user with the operating system. One would have been motivated to make this combination in order to provide help to the user in learning the system.

- **In regards to claim 11**, Cimino and Titus teach the above limitations (see claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). Cimino further teaches further comprising verification means for confirming that the identified master object physically provided to the user matches the information about the identified master object presented to the user (column 1 lines 22-33).

- **In regards to claims 12 and 13**, Cimino and Titus teach the above limitations (see claims 1, 3, 4, 14, 16, 17, 19, 21- 23, 25-29, and 32). Cimino further teaches wherein the identified master object comprises a key blank (column 2 lines 22-33).

- **In regards to claims 18 and 30**, Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach further comprising user help means for providing the user with assistance in operating the system.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches further comprising user help means for providing the user with assistance in operating the system (column 3 lines 13-42). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the teachings of Cimino and Titus to include the teachings of Palaniappan in order to provide assistance to the user with the operating system. One would have been motivated to make this combination in order to provide help to the user in learning the system.

- **In regards to claim 31**, Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach further comprising a means for recording and selectively retrieving a historical log of information about the user or the operation of the system, said means for recording and selectively retrieving a historical log operatively associated with the computer.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches further comprising a means for recording and selectively retrieving a historical log of information about the user or the operation of the system, said means for recording and selectively retrieving a historical log operatively associated with the

computer (column 5 lines 8-15). It would have been obvious for one of ordinary skill in

the art at the time of the invention to modify the teachings of Cimino and Titus to include

the teachings of Palaniappan in order to historically log information about the operation

of the system. One would have been motivated to make this combination in order to

keep track of what applications are participating in the automatic updating scheme

(column 5 lines 8-15).

- **In regards to claim 33**, Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach wherein the system operates over a computerized network.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches wherein the system operates over a computerized network (column 3 line 52- column 4 line 25). It would have been obvious for the reasons stated above (see claim 5).

- **In regards to claim 34** Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29, and 32). However Cimino and Titus do not specifically teach wherein the database is selectively updated via the computerized network and wherein the computerized network is selected from the group consisting of: a local area network, a wide area network and the internet.

Palaniappan teaches client-based background update monitoring. Palaniappan further teaches wherein the database is selectively updated via the computerized network and wherein the computerized network is selected from the group consisting of: a local area

network, a wide area network and the internet (column 3 line 52-columns 4 line 25). It

would have been obvious for the reasons stated above (see claim 5).

3.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Cimino and Titus in view of Almblad et al (hereinafter Almblad), US Patent

60605911.

Cimino and Titus teach the above limitations (see claims 1, 16, 19, 21- 23, 26, 28, 29,

and 32). However Cimino and Titus do not specifically teach further comprising an

automated means for restocking at least selected portions of the set of possible key

blanks, said automated means for restocking operatively associated with the computer.

Almblad teaches a method and apparatus for automatically making keys. Almblad

further teaches an automated means for restocking at least selected portions of the set

of possible key blanks, said automated means for restocking operatively associated with

the computer (column 31 lines 54-65). It would have been obvious to one of ordinary

skill in the art at the time of the invention to modify the method and apparatus of Cimino

and Titus to include automatic restocking of key blanks in order to make a more efficient

machine. One would have been motivated to make such a combination in order to

create a human interaction free machine and make the process more effective.

Response to Arguments

Applicant's arguments filed 7/27/09 have been fully considered but they are not

persuasive. Applicants argue that Cimino does not teach "manually inputting at least

one specified variable related to a first object into at least one input field of a plurality of

input fields, wherein at least one of said plurality of input fields <u>in the interactive user</u>

<u>interface means includes</u> at least one specified variable said specified variable being

<u>known or </u>physically observed based upon a visual inspection of the object."

Examiner disagrees. Examiner points out that Cimino does teach "<u>interactive </u>user

interface means for manually inputting at least one specified variable related to a first

object into at least one input field of a plurality of input fields (column 2 lines 43-61,

wherein when the user manually inputs the physical key wherein the profile of the key is

the specified variable and the first object is the key, wherein the input field is the key

profile information input into the database memory which then searches through a

plurality of input fields of information to match the key blank), wherein at least one of

said plurality of input fields<u> in the interactive user interface means includes</u> at least one

specified variable (column 2 lines 43-61, wherein the lensing system illuminates the

front of the key to form a cross-sectional image for the video system to convert to a

digital image as the cross-sectional image taken is the manual input of the first object),

said specified variable being <u>known or </u>physically observed based upon a visual

inspection of the object (column 2 lines 43-61, wherein the lensing system illuminates

the front of the key to form a cross-sectional image for the video system to convert to a

digital image) However, Cimino does not specifically teach the specified variable as an identification of an intended use of said object.

Titus teaches a key measurement apparatus and method. Titus further teaches a specified variable as an identification of an intended use of said object (column 18 lines 4-57).It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and apparatus of Cimino to include the teachings of Titus in order to identify the use of an object. One would have been motivated to make such a combination in order to keep an inventory of each key profile and related information (column 19 line 12-column 20 line 20, wherein a keyway profile has related information to that particular keyway profile in a look up table, such as whether it has a transponder indicating it is used for a car). Therefore, Cimino in combination with Titus teach the limitations of claim 1 and 19.

Furthermore, the claim limitations of claims 1 and 19, "an identification of an intended use of said object said specified variable being known or physically observed based upon a visual inspection of the object" is non-functional descriptional matter of the applicants claim invention. The applicant needs to elaborate more on how the intended use of the object is related to the functional part of the object identification system and is used to identify the first object.

The Examiner further suggests to the applicant claims 1 and 19 include more limitations describing the key duplication/matching identification system as described more specifically in the specification. No where in the independent claim does the system

mention a key "matching" or duplication process. Also, the Examiner suggests to

further narrow the claim language to read, "manually typing at least one specified

variable related to a first object into at least one input field of a plurality of input fields,"

to further describe what the applicant wishes to specifically claim as a, "manual input"

into the system and to expand on how the input into the system is related to the

"intended use" of the object in a more definitive way.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shashi K. Becker whose telephone number is 571-272-

8919. The examiner can normally be reached on Mon-Fri 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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